

5a_Create_Socket_for_HTTP_for_webpage_upload_and_download

AIM :

To write a PYTHON program for socket for HTTP for web page upload and download

Algorithm

- 1.Start the program.
- 2.Get the frame size from the user
- 3.To create the frame based on the user request.
- 4.To send frames to server from the client side.
- 5.If your frames reach the server it will send ACK signal to client otherwise it will send NACK signal to client.
- 6.Stop the program

Program

```
import socket
```

```
def send_request(host, port, request):
    with socket.socket(socket.AF_INET, socket.SOCK_STREAM) as s:
        s.connect((host, port))
        s.sendall(request.encode())
        response = s.recv(4096).decode()
    return response

def upload_file(host, port, filename):
    with open(filename, 'rb') as file:
        file_data = file.read()
        content_length = len(file_data)
        request = f"POST /upload HTTP/1.1\r\nHost: {host}\r\nContent-Length: {content_length}\r\n\r\n"
        request += file_data.decode()
        response = send_request(host, port, request)
    return response

def download_file(host, port, filename):
    request = f"GET /{filename} HTTP/1.1\r\nHost: {host}\r\n\r\n"
    response = send_request(host, port, request)
    # Assuming the response contains the file content after the headers
    file_content = response.split('\r\n\r\n', 1)[1]
    with open(filename, 'wb') as file:
        file.write(file_content.encode())

if __name__ == "__main__":
    host = 'example.com'
    port = 80

    # Upload file
    upload_response = upload_file(host, port, 'example.txt')
    print("Upload response:", upload_response)

    # Download file
    download_file(host, port, 'example.txt')
    print("File downloaded successfully.")
```

OUTPUT



```
PS C:\Users\SEC\Desktop\Computer Networks Lab Prg\Ex05-a> python .\Program.py
Upload response: HTTP/1.1 404 Not Found
Cache-Control: max-age=604800
Content-Type: text/html; charset=UTF-8
Date: Sat, 20 Apr 2024 07:24:43 GMT
Expires: Sat, 27 Apr 2024 07:24:43 GMT
Server: EOS (vny/0452)
Content-Length: 433

<?xml version="1.0" encoding="iso-8859-1"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
    "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en" lang="en">
  <head>
    <title>404 - Not Found</title>
  </head>
  <body>
    <h1>404 - Not Found</h1>
    <script type="text/javascript" src="//obj.ac.bcon.ecdns.net/ec_tpm_bcon.js"></script>
  </body>
</html>

File downloaded successfully.
PS C:\Users\SEC\Desktop\Computer Networks Lab Prg\Ex05-a>
```

Result

Thus the socket for HTTP for web page upload and download created and Executed